

What is claimed is:

1. A vibration isolation system for building, comprising a vibration isolation layer, the vibration isolation layer including:

an upper layer structure consisted of upper beams and/or slabs and moveable
5 bases, which is coupled to columns of the building;

a lower layer structure consisted of lower beams and/or slabs and fixed bases;
and

vibration isolation devices and elastic member horizon-resetting devices which
are mounted between the upper layer structure and the lower layer structure,
10 wherein:

A. the vibration isolation devices are mounted between the moveable bases
and the fixed bases, respectively;

B. the elastic member horizon-resetting devices are mounted between the
beams and/or slabs of the upper layer structure and the lower layer structure,
15 respectively.

2. The vibration isolation system for building according to the claim 1, wherein
each elastic member horizon-resetting device is constructed such that an upper
hole is provided in the upper beam and/or slab of the upper layer structure and a
lower hole corresponding to the upper hole is provided in the lower beam and/or
20 slab of the lower layer structure, in which the corresponding upper and lower holes
are filled with filling material, and an elastic member having an upper coupling plate
and a lower coupling plate is mounted between the filling material filled in the upper
hole and that filled in the corresponding lower hole.

3. The vibration isolation system for building according to the claim 1, wherein
25 each moveable base is divided into an upper portion and a lower portion which are
contacted with each other through concave and convex spherical surfaces provided
there between, and only the upper portion is coupled to the upper beams and/or
slabs of the upper layer structure.

4. The vibration isolation system for building according to the claim 1, wherein
30 locking devices are mounted between the upper layer structure and the lower layer

structure.

5 5. The vibration isolation system for building according to the claim 4, wherein the locking devices comprise unidirectional locking devices, and each unidirectional locking device is constructed such that an upper hole is provided in the upper beam
10 and/or slab of the upper layer structure, and a lower hole corresponding to the upper hole is provided in the lower layer structure, in which the upper and lower holes are filled with filling material, and a stepped hole having a rectangle section and divided into an upper hole portion and a lower hole portion is provided in the filling material filled in the upper hole, the size of the section of the upper hole
15 portion is larger than that of the lower hole portion, thus forming a step therein, and a stepped plug having a large upper portion and a small lower portion so as to correspond to the stepped hole passes through the stepped hole formed in the filling material of the upper hole and is then fixed at a lower end thereof to the filling material filled in the lower hole, while an upper end of the stepped plug is
20 positioned in the stepped hole.

6. The vibration isolation system for building according to the claim 4, wherein the locking devices comprise bi-directional locking devices, and each bi-directional locking device is constructed such that an upper hole is provided in the upper beam
25 and/or slab of the upper layer structure and a lower hole corresponding to the upper hole is provided in the lower layer structure, in which the upper and lower holes are filled with filling material respectively, and a plug is fixed at two ends thereof to the filling material filled in the upper hole and the lower hole respectively.

7. The vibration isolation system for building according to the claim 1, wherein damping devices are mounted between the upper layer structure and the lower
30 layer structure, each of the damping device is constructed such that an upper hole is provided in the upper beam and/or slab of the upper layer structure and a lower hole corresponding to the upper hole is provided in the beam and/or slab of the lower layer structure, in which the upper and lower holes are filled with filling material respectively, and a damping rod is fixed at two ends thereof to a bottom
surface of the filling material filled in the upper hole via a coupling plate and an

upper surface of the filling material filled in the lower hole via another coupling plate, respectively.

8. The vibration isolation system for building according to the claim 1, wherein pulling-resisting devices are provided between the structural member beams
5 connected to the columns of the building and the fixed bases, each pulling-resisting device is consisted of transversal pulling-resisting beams, vertical pulling-resisting columns and a vibration isolation mechanism, in which one transversal pulling-resisting beam connects to two vertical pulling-resisting columns so as to form a “ \cap ” shape which spans a structural member beam connected to one
10 column of the building, and a vibration isolation mechanism is provided between a bottom surface of the transversal pulling-resisting beam and a top surface of the structural member beam connected to one column of the building, the two vertical pulling-resisting columns are fixed at their bottom portions to the fixed base respectively, except for this, the transversal pulling-resisting beams and the vertical
15 pulling-resisting columns are not connected to other structural members and leave spaces there around.

9. The vibration isolation system for building according to the claim 1, wherein position-limiting devices are provided between the upper layer structure and the lower layer structure, each position-limiting device is constructed such that a lower
20 limit block is provided at the lower beam and/or slab of the lower layer structure and protruded upwardly, and an upper limit block is provided at the upper beam and/or slab of the upper layer structure and protruded downwardly, in which a space is left between the lower limit block and the upper limit block, and the elevation of the bottom surface of the upper limit block is lower than that of the top
25 surface of the lower limit block.